Appl. No. : 10/800,818
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AMENDMENTS TO THE CLAIMS

Listing of Claims:

1-36. (Canceled)

37. (Currently amended) A dental abutment for supporting a dental prosthesis on a dental implant, the abutment comprising:

an upper region comprising a bottom surface;

an interlock region extending below the bottom surface comprising a non-threaded cylindrical portion and plurality of substantially semi-circular protrusions arranged around a periphery of the cylindrical portion, wherein the cylindrical portion has a first radius and the protrusions have a second radius, a ratio of the first radius to the second radius being between approximately 4:1 and approximately 2:1 and wherein the interlock region has a length measured from the bottom surface of the upper region that is equal to a first distance; and

a non-threaded post extending below the interlock region, the post having a length measured from the bottom surface of the upper region that is equal to a second distance.

38. (Previously presented) The dental abutment according to Claim 37, wherein the ratio of the first radius to the second radius is approximately 3:1.

39. (Previously presented) The dental implant according to Claim 37, wherein the first distance is greater than 1 millimeter.

40. (Previously presented) The dental abutment according to Claim 37, wherein the abutment further comprises an inner bore.

41. (Currently amended) The dental abutment according to Claim 40, wherein inner bore includes a first region and a second region, the first region being positioned below the second region and having a diameter smaller than the second ~~first~~ region.

42. (Previously presented) The dental abutment according to Claim 41, wherein inner bore includes a seat formed between the first and second regions.

43. (Previously presented) The dental abutment according to Claim 42, wherein the second region includes capture threads.

44. (Previously presented) The dental abutment according to Claim 43, wherein the capture threads are double threaded.

45. **(Previously presented)** The dental abutment according to Claim 37, wherein the second distance is greater than approximately 3 millimeters.

46. **(Previously presented)** The dental abutment according to Claim 45, wherein the first distance is greater than 1 millimeter.

47. **(Previously presented)** The dental abutment according to Claim 37, wherein the three protrusions are arranged around the perimeter of the interlock region such that each of the protrusions are approximately 120 degrees apart from one another.

48. **(Previously presented)** The dental abutment according to Claim 37, wherein the bottom surface of the abutment has a third radius and a ratio of the third radius to the second radius being between approximately 5:1. and 4:1.

49. **(Previously presented)** The dental abutment according to Claim 48, wherein the ratio of the third radius to the second radius is approximately 4.5:

50. **(Canceled)**

51. **(Canceled)**

52. **(Canceled)**

53. **(Currently amended)** The prosthodontic component of Claim [[52]] 68, wherein the ratio of the first radius to the second radius is approximately 3:1.

54. **(Currently amended)** The prosthodontic component according to Claim [[52]] 68, wherein the first distance is greater than 1 millimeter.

55. **(Currently amended)** The prosthodontic component according to Claim [[52]] 68, wherein the three ~~channels~~ protrusions are arranged around the perimeter of the cylindrical post ~~interlock chamber~~ such that each of the ~~channels~~ protrusions are approximately 120 degrees apart from one another.

56. **(Currently amended)** A prosthodontic component for mating with a dental implant, the prosthodontic component comprising:

an upper region comprising a bottom surface;

an interlock region extending below the bottom surface comprising a non-threaded cylindrical portion and at least one substantially semi-circular ~~protrusion~~ protrusion arranged around a periphery of the cylindrical portion, wherein the cylindrical portion has a first radius and the at least one protrusion has a second radius, a ratio of the first radius to the second radius

being between approximately 4:1 and approximately 2:1 and wherein the interlock region has a length measured from the bottom surface that is equal to a first distance;

a non-threaded post extending below the interlock region, the post having a length measured from the bottom surface that is equal to a second distance; and

and an inner bore extending through the dental abutment.

57. **(Previously presented)** The prosthodontic component according to Claim 56, wherein the ratio of the first radius to the second radius is approximately 3:1.

58. **(Previously presented)** The prosthodontic component according to Claim 56, wherein the first distance is greater than 1 millimeter.

59. **(Previously presented)** The prosthodontic component according to Claim 56, wherein the second distance is greater than approximately 3 mil imeters.

60. **(Previously presented)** The prosthodontic component according to Claim 59, wherein the first distance is greater than 1 millimeter.

61. **(Previously presented)** The prosthodontic component according to Claim 56, wherein the bottom surface of the prosthodontic component has a third radius and a ratio of the third radius to the second radius is between approximately 5:1. and 4:1.

62. **(Previously presented)** The prosthodontic component according to Claim 61, wherein the ratio of the third radius to the second radius is approximately 4.5:1.

63. **(Previously presented)** A dental abutment for supporting a dental prosthesis on a dental implant, the abutment comprising:

an upper region comprising a bottom surface;

an interlock region extending below the bottom surface comprising a non-threaded cylindrical portion and at least three semi-circular protrusions arranged around a periphery of the cylindrical portion, wherein the cylindrical portion has a first radius and the protrusions have a second radius, a ratio of the first radius to the second radius being between approximately 4:1 and approximately 2:1 and wherein the interlock region has a length measured from the bottom surface that is equal to a first distance.

wherein the bottom surface of the abutment has a third radius and a ratio of the third radius to the second radius is between approximately 5:1 and 4:1.

64. **(Previously presented)** The dental abutment according to Claim 63, wherein the ratio of the first radius to the second radius is approximately 3:1.

65. **(Previously presented)** The dental abutment according to Claim 63, wherein the abutment further comprises an inner bore.

66. **(Previously presented)** The dental abutment according to Claim 63, wherein the at least three protrusions are arranged around the perimeter of the interlock region such that each of the protrusions are approximately 120 degrees apart from one another.

67. **(Previously presented)** The dental abutment according to Claim 63, wherein the ratio of the third radius to the second radius is approximately 4.1:1

68. **(New)** A dental abutment for supporting a dental prosthesis on a dental implant, the abutment comprising:

an upper region comprising a bottom surface;

a substantially cylindrical post extending below the bottom surface, the substantially cylindrical portion including a plurality of substantially semi-circular protrusions arranged around a periphery of the substantially cylindrical post, wherein the substantially cylindrical post has a first radius and the protrusions have a second radius, a ratio of the first radius to the second radius being between approximately 4:1 and approximately 2:1 and wherein the protrusions have a length measured from the bottom surface of the upper region that is equal to a first distance and the substantially cylindrical post has a length measured from the bottom surface of the upper region that is equal to a second distance, the first distance being less than the second distance.

69. **(New)** A dental abutment comprising:

a body portion with a bottom surface; and

a lower region comprising a post and an interlock region adjacent the bottom surface, the interlock region being formed as a single continuous curve having substantially no internal corners, the single continuous curve being formed from a substantially cylindrical portion and a plurality of semi-circular protrusions spaced around the periphery of the cylindrical portion at approximately 120 degrees from each other.